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available for inspection at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC 20408.

- (4) Iodine number not to exceed 2 as determined by Iodine Absorption Number, Hanus Method, of the "Official Methods of Analysis of the Association of Official Analytical Chemists," sections 28.018–28.019, 13th Ed. (1980), which is incorporated by reference. Copies may be obtained from the Association of Official Analytical Chemists International, 481 North Frederick Ave., suite 500, Gaithersburg, MD 20877–2504, or may be examined at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC 20408.
- (c) The total amount of ester (calculated as free pentaerythritol) shall not exceed 0.4 percent by weight of the polyvinyl chloride and/or the vinyl chloride-propylene copolymers complying with §177.1980.

[45 FR 1018, Jan. 4, 1980, as amended at 47 FR 11848, Mar. 19, 1982; 49 FR 10112, Mar. 19, 1984; 54 FR 24898, June 12, 1989; 57 FR 18082, Apr. 29, 1992]

§178.3700 Petrolatum.

Petrolatum may be safety used as a component of nonfood articles in contact with food, in accordance with the following conditions:

- (a) Petrolatum complies with the specifications set forth in the United States Pharmacopeia XX (1980) for white petrolatum or in the National Formulary XV (1980) for yellow petrolatum.
- (b) Petrolatum meets the following ultraviolet absorbance limits when subjected to the analytical procedure described in §172.886(b) of this chapter:

Ultraviolet absorbance per centimeter pathlength:

Millimicrons	Maximum
280 to 289	0.25
290 to 299	.20
300 to 359	.14
360 to 400	.04

(c) It is used or intended for use as a protective coating of the surfaces of metal or wood tanks used in fermentation process, in an amount not in excess of that required to produce its intended effect.

- (d) Petrolatum as defined by this section may be used for the functions described and within the limitations prescribed by specific regulations in parts 175, 176, 177, and 178 of this chapter which prescribe uses of petrolatum. For the purpose of cross-reference, such specific regulations include: §§ 175.105, 175.125, 175.300, 176.170, 176.200, 176.210, 177.2600, 177.2800, and 178.3570 of this chapter
- (e) Petrolatum may contain any antioxidant permitted in food by regulations issued pursuant to section 409 of the act, in an amount not greater than that required to produce its intended effect.

[42 FR 14609, Mar. 15, 1977, as amended at 49 FR 10113, Mar. 19, 1984; 55 FR 12172, Apr. 2, 1990]

§178.3710 Petroleum wax.

Petroleum wax may be safely used as a component of nonfood articles in contact with food, in accordance with the following conditions:

- (a) Petroleum wax is a mixture of solid hydrocarbons, paraffinic in nature, derived from petroleum, and refined to meet the specifications prescribed in this section.
- (b) The petroleum wax meets the following ultraviolet absorbance limits when subjected to the analytical procedure described in §172.886(b) of this chapter.

Ultraviolet absorbance per centimeter pathlength:

Millimicrons	Maximum
280 to 289 290 to 299 300 to 359	0.15 .12 .08
360 to 400	.02

- (c) Petroleum wax may contain any antioxidant permitted in food by regulations issued in accordance with section 409 of the act, in an amount not greater than that required to produce its intended effect.
- (d) Petroleum wax may contain a total of not more than 1 weight percent of residues of the following polymers when such residues result from use of the polymers as processing aids (filter aids) in the production of the petroleum wax: Homopolymers and/or copolymers derived from one or more of the mixed n-alkyl (C_{12} , C_{14} , C_{16} , and C_{18})

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methacrylate esters where the C_{12} and C_{14} alkyl groups are derived from coconut oil and the C_{16} and C_{18} groups are derived from tallow.

- (e) Petroleum wax may contain 2-hydroxy-4-n-octoxybenzophenone as a stabilizer at a level not to exceed 0.01 weight percent of the petroleum wax.
- (f) Petroleum wax may contain poly(alkylacrylate) (CAS Reg. No. 27029–57–8), as described in §172.886(c)(2) of this chapter, as a processing aid in the manufacture of petroleum wax.

[42 FR 14609, Mar. 15, 1977, as amended at 51 FR 19545, May 30, 1986]

§ 178.3720 Petroleum wax, synthetic.

Synthetic petroleum wax may be safely used in applications and under the same conditions where naturally derived petroleum wax is permitted in subchapter B of this chapter as a component of articles intended to contact food, provided that the synthetic petroleum wax meets the definition and specifications prescribed in §172.888 of this chapter.

§178.3725 Pigment dispersants.

Subject to the provisions of this regulation, the substances listed in this section may be safely used as pigment dispersants in food-contact materials.

Substances	Limitations
Dimethylolpropionic acid (CAS Reg. No. 4767–03–7)	For use only at levels not to exceed 0.45 percent by weight of the pigment. The pigmented articles may contact all foods under conditions of use A through H as described in Table 2 of § 176.170(c) of this chapter.
Phosphorylated tall oil fatty acids (CAS Reg. No. 68604–99–9), prepared by the reaction of dimethyl hydrogen phosphite with tall oil fatty acids.	For use only at levels not to exceed 1.0 percent by weight of the pigment. The pigmented polymeric films may contact all food under conditions of use D, E, F, and G described in table 2 of § 176.170(c) of this chapter.
Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, compd. with 1,1′,1″-nitrilotris [2-propanol] (1:1) (CAS Reg. No. 221281–21–6).	For use only at levels not to exceed 0.45 percent by weight of the pigment. The pigmented articles may contact all food under conditions of use A through H as described in Table 2 of §176.170(c) of this chapter.
Siloxanes and silicones; cetylmethyl, dimethyl, methyl 11-methoxy-11-oxoundecyl (CAS Reg. No. 155419–59–3).	For use only at levels not to exceed 0.5 percent by weight of the pigment. The pigmented polymers may contact all foods under conditions of use C, D, E, F, and G described in Table 2 of § 176.170(c) of this chapter.
Trimethylolethane (CAS Reg. No. 77–85–0)	For use only at levels not to exceed 0.45 percent by weight of inorganic pigment. The pigmented articles may contact all food under conditions of use A through H described in Table 2 of § 176.170(c) of this chapter.

[61 FR 43157, Aug. 21, 1996, as amended at 63 FR 35799, July 1, 1998; 64 FR 48292, Sept. 3, 1999; 64 FR 72273, Dec. 27, 1999; 65 FR 52909, Aug. 31, 2000]

§ 178.3730 Piperonyl butoxide and pyrethrins as components of bags.

Piperonyl butoxide in combination with pyrethrins may be safely used for insect control on bags that are intended for use in contact with dried feed in compliance with §§561.310 and 561.340 of this chapter, or that are intended for use in contact with dried food in compliance with §§193.60 and 193.390 of this chapter.

§ 178.3740 Plasticizers in polymeric substances.

Subject to the provisions of this regulation, the substances listed in paragraph (b) of this section may be safely used as plasticizers in polymeric substances used in the manufacture of articles or components of articles intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food.

- (a) The quantity used shall not exceed the amount reasonably required to accomplish the intended technical effect.
 - (b) List of substances: